A new species of the genus Amakusanthura (Crustacea, Isopoda) from Shinminato, Toyama Prefecture, middle Japan

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A New Species of the Genus *Amakusanthura* (Crustacea, Isopoda) from Shinminato,Toyama Prefecture, Middle Japan*

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富山県新湊市沿岸で発見されたウミナナフシの１新種

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富山県新湊市沿岸で採集された *Amakusanthura* 属ウミナナフシの１種を新種 *Amakusanthura toyamaensis* (和名：アリソヒゲナガウミナナフシ：新称) として記載した。本種は天草から知られている *Amakusanthura* 属としては本邦で２番目の種類である。なお、本種は *Amakusanthura elongans* と最も類似しているが、(1)第２触角が長く、各節に剛毛が少ないこと、(2)頭部中央の突起が顕著であること、(3)顎脚の形態の差異、及び(4)平衡胞が小さいこと等によって区別される。

なお、基準標本は富山市科学文化センターならびに大阪市立自然史博物館で保管される。

Mr. Ryohei Yamanishi of the Osaka Museum of the Osaka Museum Natural History. gane me a chance to study a queer-looking specimens of an anthurid isopoda. At the result of my research, they proved to be a new species belonging to the genus *Amakusanthura*.

Before going further, I wish to express my sincere gratitude to Mr. Ryohei Yamanishi of the Osaka Museum of Natural History, for his kindness in helping to study the specimens.

Amakusanhura toyamaensis, n. sp.

(Jap. name:Ariso-higenaga-uminanafushi, new)

Figs.1 and 2

Material examined:1♂(holotype, 6.0 mm in body length) and 2♀♀(1♀ allotype, 7.0 mm in body length, and 1♀ paratype, 4.8 mm in body length), intertidal zone, Shinminato City, Toyama Pref., coll. Ryohei Yamanishi, June, 1, 1978. Holotype(TOYA Cr-11254), allotype(TOYA Cr-11255)at the Toyama Science Museum, and a paratype(OMNH Ar-3482) are deposited at the Osaka Museum of Natural History.

Description of male: Body reaches 6.0 mm in length. Body almost white in alcohol, elongated and about 10 times as long as wide, excluding both antennae.

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Eye lacking. Anterolataertal angles of cephalon (Fig.1B)protruded farther than rostrum. All the peraeonal segments without any dorsal pit. Demarcations of pleonal somite visible dorsolaterally.

First antenna(Fig.1C) with distinct 4 segments; first segment large; second to fourth segments rectangular; terminal segments small and rectangular with a tuft of setae at the tip.

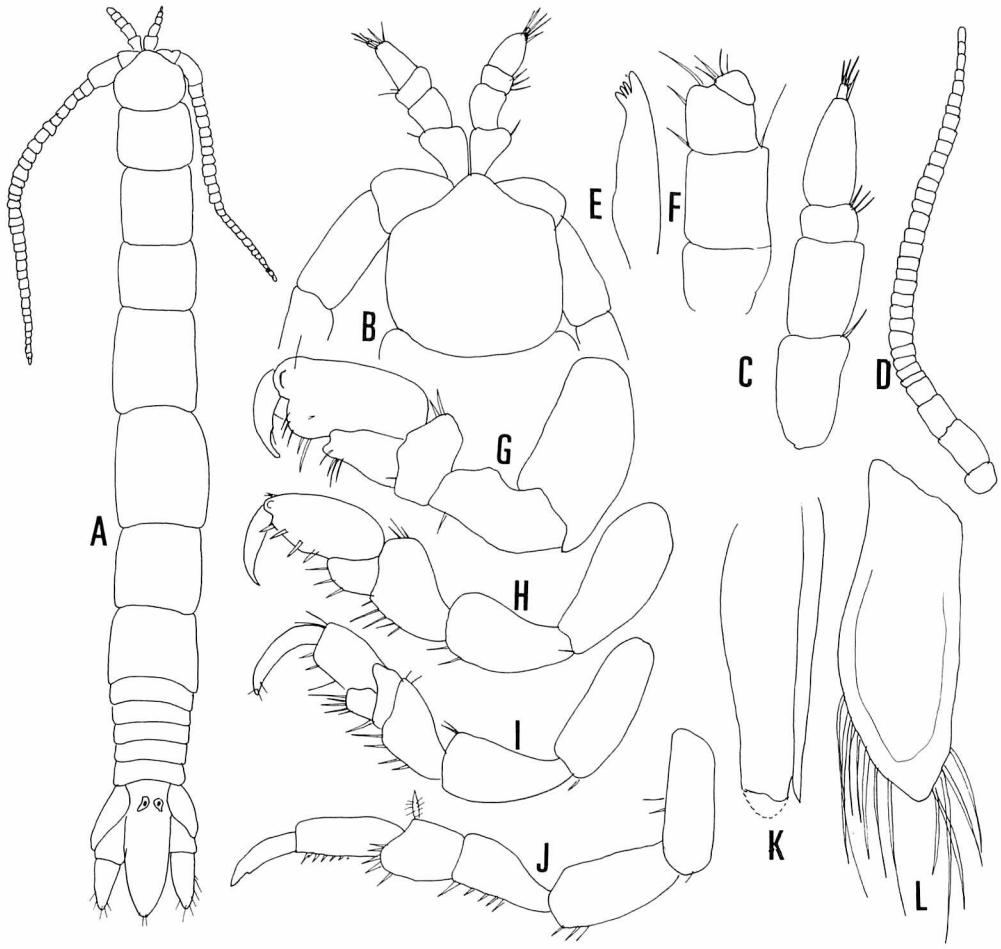

Fig.1 Male of *Amakusanthura toyamaensis* n. sp.
A. Dorsal view; B. Cephalon ;C.First antenna; D.Flagllum of Second antenna; E.First maxilla; F.Maxilliped; G-I. Pereopods 1-3; J.Pereopod 7; K.Male second pleopod; L. Exopod of Uropd.(All.Holotype male).

Second antenna(Fig.1D) with 5 distinct peduncular segments; Flagellum with 31～34 segments.

Mandible with a 3-headed apex and 3-segmented palp; first and second segments oblong without seta; terminal segment narrow.

First maxilla(Fig.1E)slender with 4 teeth at the tip.

Maxilliped(Fig.1F)composed of 4 segments; first segment rectangular; second segment short with 2 setae at inner distal corner; third segment rectangular with 3 setae; terminal segment small and semicircular with 3 setae on distal corner.

Pereopod 1(Fig.1G) subchelete; basis and ischium rectangular; merus rather short; carpus triangular; propodus big with 6 to 7 spines on inner margin.

Pereopods 2～3(Fig.1H and I) are a little slenderer than pereopod 1; basis and ischium rectnagular; merus triangular; carpus small; propodus rather stout with 4 to 6 spines on inner margin.

Pereopods 4～7(FIg. 1J) ambulatory; basis and ischium oblong; merus rectangular; carpus almost square; propodus rectangular.

Male second pleopod(Fig 1K); endopod lanceolate; stylus straight and slightly shorter than endopod, whose tip is pointed.

Exopod of uropod (FIg.1L) elliptical with many setae around the margin. Endopod of uropod oblong; terminal segment round with 20 plumose setae around the margin. Telson ovate-lanceolate, with a pair of rather big statocysts near the basal part.

Description of female: Body reaches 7.0 mm in length. Body almost white in alcohol, elongated and about 10 times as long as wide; excluding antennae. Eye lacking.

Anterolatertal angles of cephalon projected farther than rostrum. All the perenoal segments without any dorsal pit. Demarcations of pleonal somite visible dorsolaterally.

Telson ovate-lanceolate, with a pair of rather big statocysts near the basal part.

First antenna with distinctly 4-segmented; first segment large ; second to fourth segments rectangular; temrminal segments small and rectangular with a tuft of setae at the tip.

Second antenna(Fig.2D) with 7 distinct segments; first segment small; second segment largest third and fourth segments almost square; fifth segment shorter than the fourth; sixth segment abruptly narrower than the fifth; terminal segment with a tuft of setae at the tip.

Mandible(Fig.2C) with 2-headed apex and 3-segmented palp; first and second segments oblong without seta; terminal segment narrow.

First maxilla slender with 4 teeth at the tip.

Maxilliped composed of 4 segments; first segment rectangular; second segment short with 2 setae at inner distal corner; third segment rectangular with 3 setae; terminal segment small and semicircular with 3 setae on distal corner.

Pereopod 1 (FIg.2E) subchelete; basis and ischium rectangular; merus rather short; carpus triangular; propodus big with 6～7 spines on inner margin.

Pereopods 2～3 (Fig.2F) are a little slenderer than pereopod 1; basis ischium; merus

rectangular; carpus square propodus rather stout with 3 spines on inner margin.

Pereopods 4～7 (Fig.2G) are ambulatory; basis and ischium oblong; merus rectangular; carpus almost square; propodus rectangular.

All the pleopods not characteristic in female.

Uropod (Fig.2H)elliptical with many setae around the margin. Endopod oblong; terminal segment round with 20 plumose setae around the margin.

Ecology: The present new species was caught from the intertidal zone, together with another anthuridea, *Paranthura japonica* Richardson.

Remarks: The present new species is most closely allied to *Amakusanthura elegans* Nunomura from Amakusa, Kumamoto Pref., western Kyushu. But the former is separated from the latter in the following features: (1)longer and more numerous flagella of second antenna, (2) less prominent projection of cephalon, (3) morphology of maxilliped, and (4)

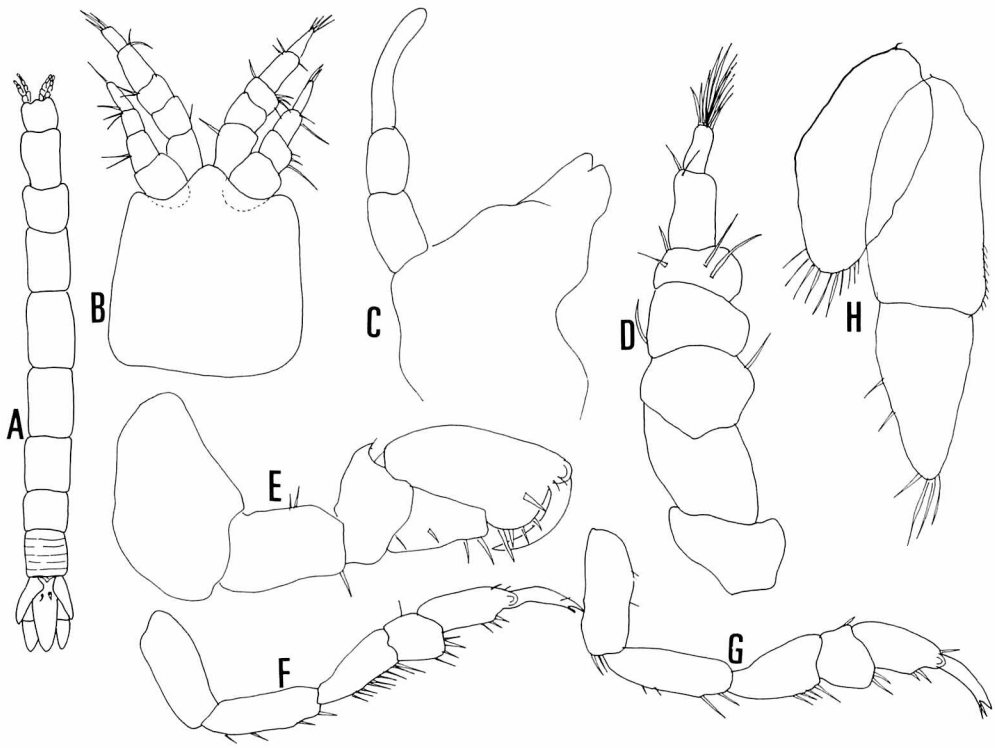

Fig.2 Female of *Amakusanthura toyamaensis* n. sp.
A. Dorsal view; B.Cephalon; C.Mandible; D.Second antenna; E.Pereopod 1; F.Pereopod 2; G.Pereopod 7; H.Uropod.(All:Female allotype))

smaller statocysts.

References

Barnard, 1925 A revision of the Family Anthuridae(Crustacea, Isopoda) with remarks on certain morphological pecurialities. Juour. Linn. Soc.36: 109-160.

Nunomura, N.1977. Marine Isopoda from Amakusa Kyushu(1) Publ. Amakusa Mar. Biol. Lab.(2):71-90.

Nunomura, N.1985. Marine tanaid and isopod crustacean off Kagawa Prefecture, Seto Inland Sea. Special Publ. Mukaishima Mar. Biol. Sta., 101-112.

Poore,G.C.B.& H.M.Lew Ton,1985.*Apanthutra,Apanthuretta* and *Apanthuroides* gen. nov. (Crustacea isopoda Anthuridae) from South eastern Australia. Mem. Mus. of Victoria 46:103-151.

Poore,G.C.B.& H.M.Lew Ton, 1988. *Amakusanthura* and *Apanthura* (Crustacea, Isopoda, Anthuridea) with New Species from Tropical Australia. Mem. Mus. Victoria, 49 : 107 -147.